

### ABSTRACT OF THE DISCLOSURE

A three-dimensional sound system includes a wireless audio signal transmission method for transmitting audio signals between a transmitting device and a spatially adjacent receiving device associated with an audio signal reproduction device such as a speaker. The audio signals may be digitized in the transmitting device, compressed, and transmitted by a digital high-frequency transmission method as data packets. Symbols may be assigned to the individual data in a quadrature signal plane. A diversity operation takes place between the transmitting device and the receiving device, where the transmitting device has two high-frequency transmitters with quadrature conversion which are each connected to an associated transmission antenna. On the receiver side, each audio signal reproduction device has a receiving device with one receiving antenna and one high-frequency receiver. Differentiation of the two received high-frequency data streams having the individual symbols in coded form may be implemented in a decoding device.